



dbstart and dbshut

Automating Database Startup and Shutdown on Unix
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An Overview

- The Relevant Files and Scripts
- Configuring Your System
- Problem Solving
- Other Reminders
- Resources
- Helpful Websites



The Relevant Files and Scripts

- `/var/opt/oracle/oratab`
- `$ORACLE_HOME/bin/dbstart`
- `$ORACLE_HOME/bin/dbshut`
- `/etc/init.d/dbora`
- `/etc/rc0.d/K01dbora`
- `/etc/rc2.d/S99dbora`



Configuring Your System

- Setting 'Y' to entry in oratab.
- Modifying dbstart.
- Modifying dbshut.
- Creating dbora.
- Understanding the startup directories.
- Linking dbora to K10dbora and S99dbora.

Setting 'Y' to entry in Oratab

- Located either in `/var/opt/oracle` or `/etc`
- Created by running `root.sh` after oracle products install.
- Entries follow this format:
`$ORACLE_SID:$ORACLE_HOME:<N|Y>`
- For example,
`dev:/opt/oracle/product/8.1.6:Y`

Modifying dbstart

- Located in \$ORACLE_HOME/bin
- Save a copy of dbstart, then change:
■ /PLVSQL (Release|Version)/
{substr(\$3,1,3) ; print substr(\$3,1,3)}"
to:
- /Oracle8i Enterprise Edition
(Release|Version)/ {substr(\$5,1,3) ; print
substr(\$5,1,3)}"

(part of) dbstart script

```
# export LD_LIBRARY_PATH

        PFILE=${ORACLE_HOME}/dbs/init${ORACLE_SID}.ora

# Figure out if this is a V5, V6, or V7 database. Do we really need V5?
if [ -f $ORACLE_HOME/bin/sqldba ] ; then
    VERSION=`$ORACLE_HOME/bin/sqldba command=exit | awk '
        /SQL\*DBA: (Release|Version)/ {split($3, V, ".") ;
        print V[1]}`
else
    if test -f $ORACLE_HOME/bin/svrmgr1 ; then
        VERSION=`$ORACLE_HOME/bin/svrmgr1 command=exit | awk '
            /Oracle8i Enterprise Edition (Release|Version)/ {substr
($5,1,3) ;
            print substr($5,1,3)}`
echo $VERSION
    else
        VERSION="8.2"
    fi
fi
STATUS=1
if [ "$VERSION" = "8.1" ]
    then
```

Modifying dbshut

- Located in \$ORACLE_HOME/bin
- Replace “shutdown” with “shutdown immediate”

```
svrmgr1 << EOF
connect internal
shutdown immediate
EOF
```




Creating dbora

- dbora must be owned by root.
- Located in /etc/init.d
- Shut listener before you shut database.
- Startup database before you start listener.

```
dbprep - SecureCRT
File Edit View Options Transfer Script Window Help
# !/bin/sh
# Set ORA_HOME to be equivalent to the ORACLE_HOME
# from which you wish to execute dbstart and
# dbshut
# set ORA_OWNER to the user id of the owner of the
# Oracle database in ORA_HOME
ORA_HOME=/opt/oracle/product/8.1.6
ORA_OWNER=oracle
if [ ! -f $ORA_HOME/bin/dbstart ]
then
echo "Oracle startup: cannot start"
exit
fi
case "$1" in
`start`)
# Start the Oracle databases:
# The following command assumes that the oracle login will not prompt the
# user for any values
su - $ORA_OWNER -c "$ORA_HOME/bin/dbstart"
su - $ORA_OWNER -c "$ORA_HOME/bin/lsnrctl start"
;;
`stop`)
# Stop the Oracle databases:
# The following command assumes that the oracle login will not prompt the
# user for any values
su - $ORA_OWNER -c "$ORA_HOME/bin/lsnrctl stop"
su - $ORA_OWNER -c "$ORA_HOME/bin/dbshut"
;;
esac
Ready Telnet 1, 1 30 Rows, 84 Cols VT100
```



Understanding the Startup Directories

- /etc/rcX.d
- /etc/rc0.d, /etc/rc2.d
- [K|S][2 digit number][filename]
- /etc/rc0.d/K01dbora
- /etc/rc2.d/S99dbora



Linking dbora to K01dbora and S99dbora

- # ln -s /etc/init.d/dbora /etc/rc0.d/K10dbora
- # ln -s /etc/init.d/dbora /etc/rc2.d/S99dbora

Problem Solving

- Database “<SID>” warm started.

```
# ./dbora start
Sun Microsystems Inc.   SunOS 5.6           Generic August 1997
You have new mail.

Database "style" warm started.
Sun Microsystems Inc.   SunOS 5.6           Generic August 1997
You have new mail.

LSNRCTL for Solaris: Version 8.1.6.0.0 - Production on 06-FEB-2002 14:10:39

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Starting /opt/oracle/product/8.1.6/bin/tnslsnr: please wait...
```

Problem Solving (contd.)

- [!]: command not found
 - (when dbora executes)
- cat: cannot open /var/opt/oracle/oratab
- Message 850 not found; No message file for product=network, facility=NL:

```
LSNRCTL for Solaris: Version 8.1.6.0.0 - Production on 06-FEB-2002 14:37:15
(c) Copyright 1998, 1999, Oracle Corporation. All rights reserved.
Message 850 not found; No message file for product=network, facility=NL
LSNRCTL>
```



Other Reminders

- Ensure oracle's ENV variables are set in the .profile file.
- Ensure dbora, dbstart and dbshut are executable.
- Ensure there is a new line after the final oratab entry.
- Ensure there is no conflicting SQL or SQL*Plus commands in glogin.sql.

Successful Results!

```
# ./dbora start
Sun Microsystems Inc.   SunOS 5.6       Generic August 1997
You have new mail.

SQL*Plus: Release 8.1.6.0.0 - Production on Wed Feb 6 15:39:46 2002

(c) Copyright 1999 Oracle Corporation.  All rights reserved.

SQL> Connected to an idle instance.
SQL> ORACLE instance started.

Total System Global Area 155316208 bytes
Fixed Size                 69616 bytes
Variable Size              88047616 bytes
Database Buffers          67108864 bytes
Redo Buffers               90112 bytes
Database mounted.
Database opened.
SQL>

      DBID NAME          CREATED   RESETLOGS_CHANGE# RESETLOGS
-----
PRIOR_RESETLOGS_CHANGE# PRIOR_RES LOG_MODE      CHECKPOINT_CHANGE#
-----
ARCHIVE_CHANGE# CONTROL CONTROLFI CONTROLFILE_SEQUENCE# CONTROLFILE_CHANGE#
-----
CONTROLFI OPEN_RESETL VERSION_T OPEN_MODE
-----
3460563199 STYLE      10-OCT-01                1 10-OCT-01
```



```
0 NOARCHIVELOG 554761837
554720851 CURRENT 10-OCT-01 649 554761837
06-FEB-02 NOT ALLOWED 10-OCT-01 READ WRITE
```

```
SQL> Disconnected
```

```
Database "style" warm started.
Sun Microsystems Inc. SunOS 5.6 Generic August 1997
You have new mail.
```

```
LSNRCTL for Solaris: Version 8.1.6.0.0 - Production on 06-FEB-2002 15:39:53
```

```
(c) Copyright 1998, 1999, Oracle Corporation. All rights reserved.
```

```
Starting /opt/oracle/product/8.1.6/bin/tnslsnr: please wait...
```

```
TNSLSNR for Solaris: Version 8.1.6.0.0 - Production
System parameter file is /opt/oracle/product/8.1.6/network/admin/listener.ora
Log messages written to /opt/oracle/product/8.1.6/network/log/listener.log
Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(KEY=EXTPROC)))
Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=10.1.10.241)(PORT=1521))
)
Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=10.1.10.241)(PORT=2481))
(PROTOCOL_STACK=(PRESENTATION=GIOP)(SESSION=RAW)))
```

```
Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=IPC)(KEY=EXTPROC)))
```

```
STATUS of the LISTENER
```

```
-----
Alias LISTENER
Version TNSLSNR for Solaris: Version 8.1.6.0.0 - Production
Start Date 06-FEB-2002 15:39:54
Uptime 0 days 0 hr. 0 min. 0 sec
Trace Level off
```

```
Security                OFF
SNMP                    OFF
Listener Parameter File /opt/oracle/product/8.1.6/network/admin/listener.ora
Listener Log File       /opt/oracle/product/8.1.6/network/log/listener.log
Services Summary...
  style                 has 1 service handler(s)
The command completed successfully
#
```



Resources

■ Oracle's Metalink

- User Forums at Unix Installation/OS: RDBMS Technical Forum
- Note: 1049087.6, SUN: dbstart/dbshut fail - cannot open oratab file
- Note: 1019793.6, , Automatic startup/shutdown of oracle instances on SUN solaris
- Note: 98418.1, WARNING: “dbstart” does not work with 8.1.6 instances
- Note:1005041.6, HOW TO AUTOMATICALLY START THE LISTENER ON UNIX



Resources (contd.)

- Oracle 8i Installation Guide, Chapter 4
 - Automate Database Startup and Shutdown
- Oracle 24x7 Tips & Techniques
 - by Venkat S. Devraj
- UNIX - The Complete Reference
 - by Rosen, Host, Farber, and Rosinski
- /etc/init.d/README
- man pages for init.d, init, ln, su



Helpful Websites

- <http://metalink.oracle.com/>
 - Oracle Metalink
- http://technet.oracle.com/docs/products/oracle8i/doc_index.htm
 - Oracle 8i Installation Guide
- <http://www.orafaq.com/faq.htm>
 - Oracle FAQ's



The End.

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Thank you!

Do you have any questions?